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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/085,086	03/01/2002	Denis Gallant	12494-US	9111

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EXAMINER	
TRAN, DZUNG D	
ART UNIT	**PAPER NUMBER**
2613	

DATE MAILED: 03/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/085,086	GALLANT ET AL.	
	Examiner	Art Unit	
	Dzung D. Tran	2633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 February 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) *1-12 and 15-18* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *13 and 14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The finality of the rejection of the last Office action is vacated, the new rejection is based on Halgren U.S. publication no. 2002/0105696 in view of Nygaard, jr U.S. patent no. 6,785,622 and, therefore, the finality of that action is withdrawn.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Halgren U.S. publication no. 2002/0105696 in view of Nygaard, jr U.S. patent no. 6,785,622.

Regarding claim 13, Halgren discloses a transparent optical-electronic switch comprising:

means for recovery a data rate from an incoming serial signal (page 2, paragraph 0025);

means for monitoring signal quality of the incoming signal by monitoring the SONET overhead signal (page 2, paragraph 0027); and

means for providing data integrity across the transparent switching fabric by providing retimed data suitable for input to the electronic switch matrix so that the retimed data may be used for performance monitoring (page 2, paragraph 0027);

means to provide line loop-back of a signal having undergone re-shaping, re-amplification and reshaping in a clock data recovery unit (e.g., Figures 4 and 5 shown the loopback of the clock data recovery signal thru the electronic switch 3 and page 2, paragraph 0027 discloses the output bit clock and the retimed data may be used for performance monitoring). Thus the monitoring signal must loop-back for performance monitoring. Halgren differs from claim 1 of the present invention in that Halgren does not specifically disclose using an ingress CDR to monitor data eye opening. Nygaard, jr discloses a logic analyzer for eye diagram (col. 2, line 66 to col. 3, line 39). Since it is well recognized in the art that BERT have been used to measure eye diagram or to generate eye diagram (col. 1, lines 29-35, col. 2, line 43). At the time of the invention was made, it would have been obvious to a person of ordinary skill in the art to include the logic analyzer of Nygaard in the system of Halgren for analyzing or monitoring the eye diagram (col. 3, lines 33-39 of Nygaard). One of ordinary skill in the art would have been motivated to do that in order to detect data integrity of the optical system.

Regarding claim 14, Halgren discloses a transparent optical-electronic switch comprising:

means for recovery a data rate from an incoming serial signal (page 2, paragraph 0025);

means for monitoring signal quality of the incoming signal by monitoring the SONET overhead signal (page 2, paragraph 0027); and

means for providing data integrity across the transparent switching fabric by providing retimed data suitable for input to the electronic switch matrix so that the retimed data may be used for performance monitoring (page 2, paragraph 0027);

means to provide line loop-back of a signal having undergone re-shaping, re-amplification and reshaping in a clock data recovery unit (e.g., Figures 4 and 5 shown the loopback of the clock data recovery signal thru the electronic switch 3 and page 2, paragraph 0027 discloses the output bit clock and the retimed data may be used for performance monitoring). Thus the monitoring signal must loop-back for performance monitoring. Halgren differs from claim 1 of the present invention in that Halgren does not specifically disclose using an ingress CDR to monitor data eye opening. Nygaard, jr discloses a logic analyzer for eye diagram (col. 2, line 66 to col. 3, line 39). Since it is well recognized in the art that BERT have been used to measure eye diagram or to generate eye diagram (col. 1, lines 29-35, col. 2, line 43). At the time of the invention was made, it would have been obvious to a person of ordinary skill in the art to include the logic analyzer of Nygaard in the system of Halgren for analyzing or monitoring the eye diagram (col. 3, lines 33-39 of Nygaard). One of ordinary skill in the art would have been motivated to do that in order to detect data integrity of the optical system.

Response to Arguments

4. Applicant's arguments with respect to claims 13 and 14 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dzung Tran whose telephone number is (571) 272-3025.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Jason Chan, can be reached on (571) 272-3022.

The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Dzung Tran

03/16/2006

Dzung Tran